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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Patrick J. Treado

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EXAMINER

PRITCHETT, JOSHUA L

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/698,584	Applicant(s) TREADO ET AL.	
	Examiner JOSHUA L. PRITCHETT	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 41 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 41 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Amendment filed March 5, 2008. Claims 1, 41 and 42 have been amended as requested by the applicant.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-8, 13-15, 41 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Utzinger (US 2002/0065468) as evidenced by Rigler (US 2002/0114224).

Regarding claims 1, 41 and 42, Utzinger teaches an apparatus comprising a light source (14) for illuminating a specimen (Figs. 1-3); light gathering optics for gather light reflected from the specimen (Fig. 3); an electronically tunable filter (26) for transmitting light of specific, selected wavelengths (para. 0015 and 0025); an image sensor (28) for sensing an image, the image sensor having a predetermined number of pixels (Fig. 3); a computer (30), the computer being coupled to the electronically tunable filter and the image sensor (Fig. 3) software running

on the computer (para. 0032) tuning the electronically tunable filter to a specific wavelength or a series of specific wavelengths (para. 0032) and collecting and storing the intensity of the reflected light at each of the pixels for each of the specific wavelengths to which the electronically tunable filter is tuned (Fig. 1) producing a spatially accurate wavelength resolved image of the specimen (para. 0032). Utzinger further teaches the use of the apparatus in fluorescent spectroscopy (para. 0003). Although Batchelder does not discuss the type of forensic specimen, the specimens listed in claims 1, 41 and 42 include specimens that can inherently be used in fluorescent spectroscopy. The inherency is shown by evidence in Rigler (US 2004/011424), which states that fluorescent spectroscopy can be used to examine body fluids (para. 0002). The oils that produce fingerprints can be considered bodily fluids. Blood, semen and saliva are also bodily fluids as are the pigments that color the body's skin. Further these different specimens have been disclosed as functional equivalents in the current specification. Still further the Utzinger reference teaches all the claimed structural limitations of the current invention and would therefore be able to perform any claimed functional limitation of the current invention including the type of specimen analyzed.

Regarding claim 2, Utzinger teaches the light source is incident to the specimen (Fig. 3).

Regarding claim 3, Utzinger teaches the light source emits a specific wavelength or range of wavelengths (para. 0014).

Regarding claim 4, Utzinger teaches the light gathering optics comprise a microscope lens (22).

Regarding claim 6, Utzinger teaches the electronically tunable filter comprises one or more liquid crystal tunable filters (para. 0015).

Regarding claim 7, Utzinger teaches the bandwidth of the liquid crystal tunable filter ranges from 5 cm -10 nm (para. 0031).

Regarding claim 8, Utzinger teaches the electronically tunable filter comprises an acousto-optical filter (para. 0015).

Regarding claim 13, Utzinger teaches an optical train disposed between the light gathering optical and the electronically tunable filter for matching the spatial characteristics of the light reflected by the specimen to the tunable filter (Fig. 3).

Regarding claim 14, Utzinger teaches a display device for rendering images and graphical representations of the specimen (Fig. 1).

Regarding claim 15, Utzinger teaches the software performs the function of composing an image for rendering on the display, the image composed of light reflected by the specimen at a specific wavelength or range of wavelengths to which the tunable filter has been tuned (para. 0032).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 9, 10, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Utzinger (US 2002/0065468) as evidenced by Rigler (US 2002/0114224) in view of Batchelder (US 5,689,333).

Regarding claim 5, Utzinger teaches the invention as claimed but lacks reference to macro lens. Batchelder teaches the light gathering optics comprise a macro lens (34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Utzinger invention include the macro lens of Batchelder for the purpose of viewing larger samples.

Regarding claim 9, Utzinger teaches the invention as claimed but lacks reference to an array. Batchelder teaches the image sensor is a two-dimensional imaging focal plane array (Fig. 8; col. 9 lines 20-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Utzinger invention include the focal plane array of Batchelder for the purpose of creating a two-dimensional image of the sample.

Regarding claim 10, Utzinger teaches the image sensor is a charge coupled device (para. 0015).

Regarding claim 12, Utzinger teaches the invention as claimed but lacks reference to mirrors. Batchelder teaches one or more mirrors for spatially directing the light reflected by the specimen (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Utzinger invention include the mirrors of Batchelder for the purpose of folding the optical path to reduce the size of the apparatus.

Regarding claim 16, Utzinger teaches the invention as claimed but lacks reference to intensity versus wavelength graph. Batchelder teaches the software performs the function of composing a graphical representation of the specimen, being a graph of intensity versus wavelength for specific pixels or groups of pixels (Figs. 4-6; col. 10 lines 50-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the

Utzinger invention include the graph of Batchelder for the purpose of identifying an unknown sample.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Utzinger (US 2002/0065468) as evidenced by Rigler (US 2004/0114224) in view of Batchelder (US 5,689,333) as applied to claim 9 further in view of Fillard (US 5,770,856).

Utzinger as evidenced by Rigler teaches the invention as claimed but lacks reference to a gallium arsenide detector. Fillard teaches the use of a gallium arsenide detector to collect light (col. 2 lines 55-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Utzinger invention include the gallium arsenide detector of Fillard for the purpose of accurately and precisely collecting light with known technology to yield predictable results.

Response to Arguments

Applicant's arguments, see Amendment, filed March 3, 2008, with respect to the rejection(s) of claim(s) 1 under Batchelder have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Utzinger. The applicant amended the claim language to overcome the Batchelder reference. The Utzinger reference was added to teach the newly claimed limitations.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA L. PRITCHETT whose telephone number is (571)272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua L Pritchett/
Primary Examiner
Art Unit 2872